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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,410	09/15/2003	Lev Novik	13768.783.278.1	2719

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EXAMINER	
TRUONG, LECHI	
ART UNIT	**PAPER NUMBER**
2194	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/19/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/663,410	NOVIK ET AL.	
	Examiner	Art Unit	
	LeChi Truong	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *15 September 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) *1-10* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *05/03/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-10 are presented for the examination.

Claim Rejections - 35 USC § 101

2. The language of claims 1-10 raise a question as to whether the claims are abstract idea and would not result in practical application producing a useful, concrete, and tangible result to form the basic of statutory subject matter under 35 U.S.C 101. For example, determining two nodes, providing a resulting OR node, merging each child node, adding each child node, evaluating each topmost node are an abstract idea that do not produce any tangible result< e.g. just a though or just a compotation within a processor with is not out put to create a tangible result which enables the usefulness to be realized.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Birsan et al (US 6,848078 B1) in view of Graunke et al (US. 5,852826) and further in view of Ehab (A Survey of Event Filtering Mechanisms for Dynamic Multi-point Applications).

As to claim 1, Birsan teaches the invention substantially as claimed including: a first tree, second tree (two hierarchical structure files/ base and modified files, col 1, ln 41-45), combining first and second trees (col 1, ln 41-45), a topmost level nodes at the a topmost level (the root, col 7, ln 33-36), determining whether two nodes at a topmost level of each of the first and second trees are both the same nodes (col 7, ln 33-36), a resulting node of a single resultant tree (a merge tree, col 7, ln 33-36/ root 3, ln 8, ln 12-16), each child node of the first/ second tree(each level nodes, col 7, ln 33-36/ elements from a said base file and elements from said modified child, col 2, ln 64-67/ child 1, child 2, col 8, ln 37-43), adding each child node of the first tree and each child node of the second tree to the resulting node as a child(col 7, ln 33-36/ col 2, ln 64-67/ col 8, ln 37-43), cannot be successfully combined (if there is no child or rood2 the same identify , col 8, ln 12-16) , evaluating each topmost node(col 8, ln 17-23).

Biran does not explicitly teaches merging each child node of the first tree with a child node of the second tree into a merged node when such nodes can be successfully combined, and adding each merged node to the resulting node as a child node. However, Graunke teaches merging each child node of the first tree with a child node of the second tree into a merged node when such nodes can be successfully combine, adding each merged node to the resulting node as a child node (an equal number of record from stream elements 32 a and 32 b are identified. A process then perform a binary search on the stream element ...The reserved records are merger at node34 a to form stream element 36 a ... records from these elements are then merged at higher level node 38 a, col 8, ln 9-22).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the teaching of Birsan and Graunke because Graunke's merging each child

node of the first tree with a child node of the second tree into a merged node would improve the teaching of Brisan by providing an efficiency amount of time spending for reserve records from two input streams.

Birsan and Graunke do not teach a filtering, OR node. However, Ehab teaches a filtering (event filter is a set of predicates. Each predicate is defined as a Boolean-valued expression that returns true or false. Predicates may be joined by operators (such as AND, OR and NOT) enable the composition of arbitrarily complex filter expressions. Thus a filter or event expression is a set of predicates joined by operators. Filters can be joined together to form an optimized filter by a process called filter composition, sec: 2.1, ln 23-32).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the teaching of Birsan, Graunke and Ehab because Ehab's filtering, OR node improve the teaching of Birsan and Graunke's systems allowing the filters can joined together to produce an optimized filter with high performance, scalability and usability of event filtering.

As to claim 2, Graunke teaches merging child nodes beneath a merged node into a merged child node when child nodes can be successfully combined (col 8, ln 9-22).

As to claim 3, Graunke teaches performing a union of a set of data points of each node (col 8, ln 8-16).

As to claim 4, Ehab teaches treating the other topmost node as a single child of an OR node (sec: 2.1, ln 24-27).

As to claim 5, Birsan teaches determining whether the two topmost nodes represent a same event variable (col 7, ln 32-36).

As to claim 6, Birsan teaches adding the first and second trees to the node as children thereof (col 7, ln 32-36).

As to claim 7, Graunke teaches the two topmost nodes represent the same event variable, and further comprising, merging the two topmost nodes into a merged node (col 8, ln 9-15).

As to claim 8, Graunke teaches merging the topmost nodes includes performing a union of a set of data points of each node (col 8, ln 9-22).

As to claim 9, Graunke teaches merging child nodes at each level of children below the merged node into a merged child node when such child nodes can be merged (col 8, ln 9-22).

As to claim 10, Ehab teaches traversing the resultant filtering tree with actual event data (sec: 3.2.1, ln 33-40).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is (571) 272 3767. The examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomson, William can be reached on (571) 272 3718. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR of Public PAIP. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIP system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

LeChi Truong

January 5, 2007